

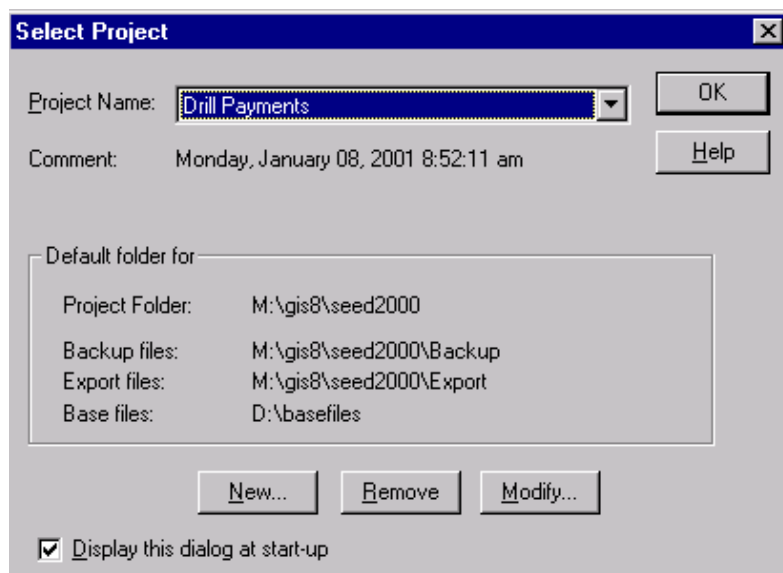
GPS Data Processing in the Office

GPS data from the field must be processed before it can be used. This includes Down Loading it from the data logger to the PC, Differentially Correcting the data, and Exporting the data to GIS. This document contains instructions for Down Loading and Differentially Correcting the data. Exporting to GIS is covered in separate documents.

1) Start “Path Finder Office” (GPS software). Path Finder Office is located on three PC’s in the office. The PC’s are the following:

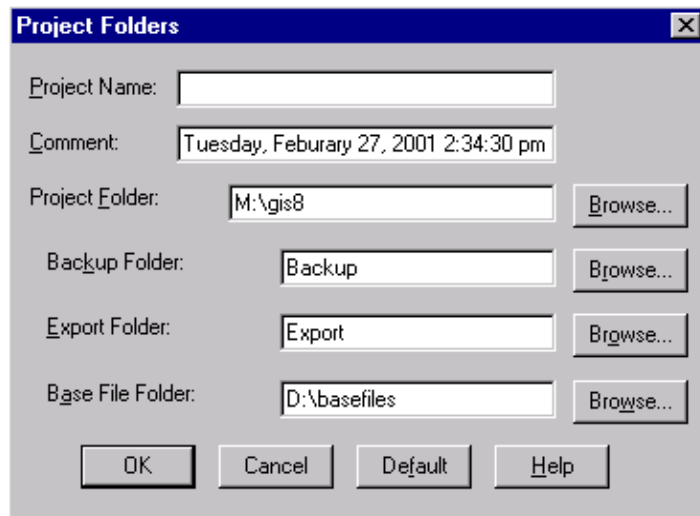
- Renewable General Use PC near the Mail Room
- Non Renewable PC near the west door to the office.
- Engineering PC in the Engineering Department

2) Select a project or create a new project



- If you are adding data to a project you were working on before select the “Project Name”
- If you are on a different PC and need to add data to a project created on another PC you will need to recreate the project on this PC by clicking on “New”.
- If you are adding data to a project someone else created you will need to create it as you on this PC by clicking on “New”
- If you are starting a new project click on “New”

New Project



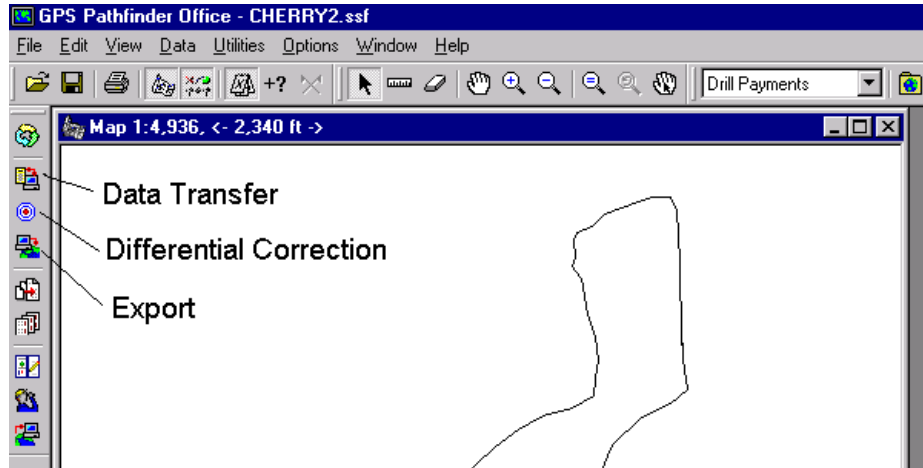
The screenshot shows a 'Project Folders' dialog box with the following fields and values:

- Project Name: [Empty]
- Comment: Tuesday, February 27, 2001 2:34:30 pm
- Project Folder: M:\gis8
- Backup Folder: Backup
- Export Folder: Export
- Base File Folder: D:\basefiles

Buttons at the bottom: OK, Cancel, Default, Help.

- “Project Name”** The name of your project. Something like “Fires 2001”
- “Project Folder”** Where will the GPS data be stored. For example “M:\gis8\2001_fires”. For large GIS projects please get an area assigned to you by the GIS Coordinator. Small projects you can put in your work space in N:\....
- “Backup Folder”** Where will “Path Finder Office” keep backup files of the GPS files you have down loaded. “Path Finder Office” keeps a backup of all files down loaded to it. The default is “Backup” in the “Project Folder”
- **“Export Folder”** Where will GIS files be exported to. The default is “Export” in the “Project Folder”.
- “Base File Folder”** Where will “Path Finder Office” put the Base Station files. The default is to put them in a folder called “Base” in the “Project Folder”. The best place for this is in a location on the local hard drive like “D:\basefiles”. That way the base files are not using up space on the network. Base files do not need to be kept.

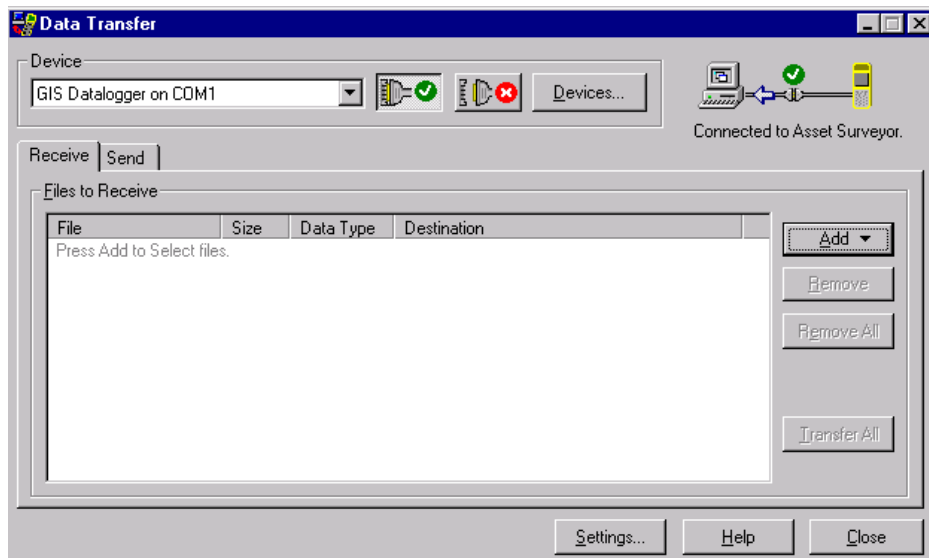
Path Finder Office Main Menu



There are three steps to processing GPS data. They are **Data Transfer, Differential Correction, and Export.**

3) Data Transfer (Down Load from the Data Logger)

- A) Plug the data logger into the data cable on the PC. You can use either the top or bottom port on the TSC1 data logger. The data cable should already be plugged in to one of the serial ports on the PC. If it is not it normally goes in COM1. The Geo Explorer's have there own cable that is kept in the computer room.
- B) Turn the data logger on. On the TSC1 data logger you will need to push the "ESC" key three times to cancel out of the "Connecting to GPS". If the TSC1 data logger times out and gives you the message "No GPS Detected" answer "No" with the "F5" key.
- C) On the TSC1 data logger select <File manager> <File transfer>
On the Geo Explorer select <Data Transfer>
- D) On the PC click on the "Data Transfer" icon as shown above.



The data transfer box will open. The **RED** “X” in the upper right corner should turn to a **GREEN** “✓” after a few moments. If it does not turn green you will need to redo step 3C or select a new device in the upper left corner of the “Data Transfer” window. If there are no devices listed there you will need to configure a new device by clicking on “Devices” top middle of the “Data Transfer” window. The PC should have been setup for you with a “GIS Datalogger on COM1”. It is possible that you will need to change it to “GIS Datalogger on COM2”

- E) Add the files by clicking on <Add> <Data Files> on the right side of the “Data Transfer” window. Select the files you want to transfer and click on <Open>. Now the files you are going to transfer are listed in the “Data Transfer” window. Click on <Transfer All> on the right side of the “Data Transfer” window to transfer the files.
- F) Close the “Data Transfer” window. <Close>.
- G) On the data logger <ESC> out of the transfer mode.
- H) Delete the files off the data logger. Then the data logger is clean for the next use.
 - TSC1 <File manager> <Delete Files>. Either select them individually or “DelAll” <F5>.
 - Geo Explorer <Data Capture> <Delete File>.

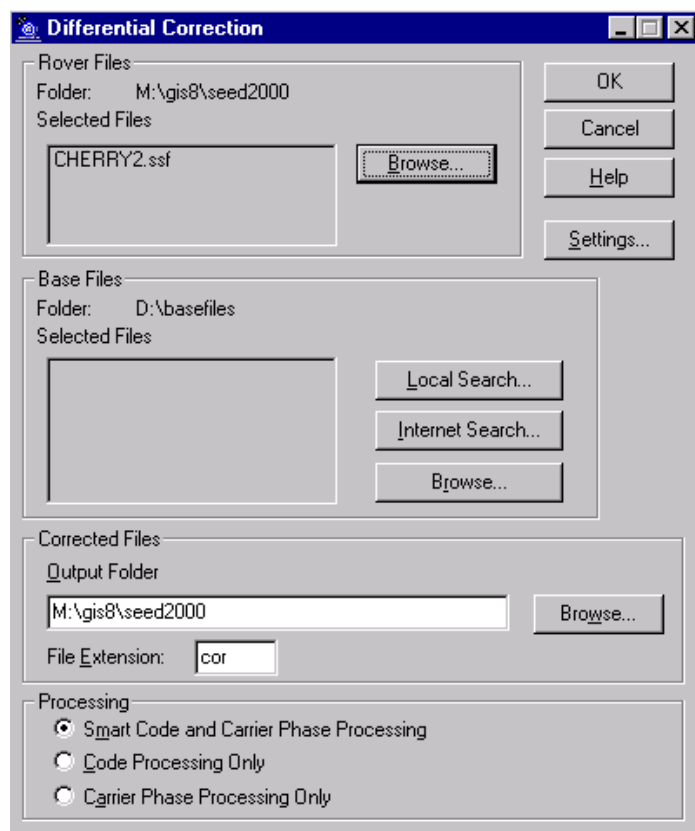
4) Differentially Correct the file or files

- A) Click on the Differential Correction icon as shown on page three.

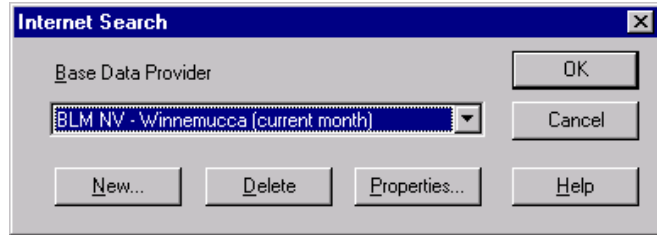


The Differential Correction window will open. In this window you will need to select the Rover files that need correcting and the Base Station files to correct them with.

- B) Click on <Browse> in the Rover part of the window (The top part of the window) and select the files to be corrected.
- C) Click on <Internet Search> to find the Base Station Files. The “Internet Search” window will open

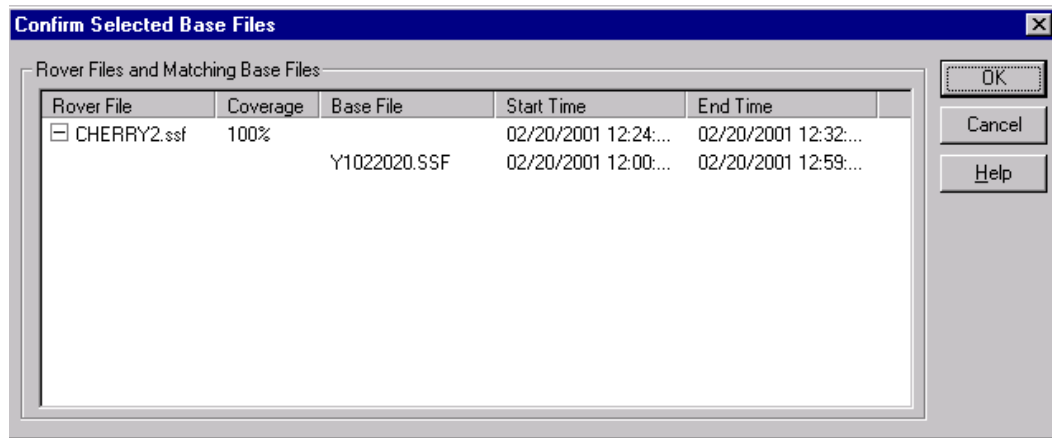


D) Select “BLM - Winnemucca (Current month)”. Then <OK>. If it is not in the list you will need to click on <New>. You will be asked if you want to get a list of base stations from Tremble and you do. From Tremble’s list select Winnemucca’s base station from near top of the list. If your Rover file was collected during last month or earlier you will need to use “BLM - Winnemucca (Last month)”.



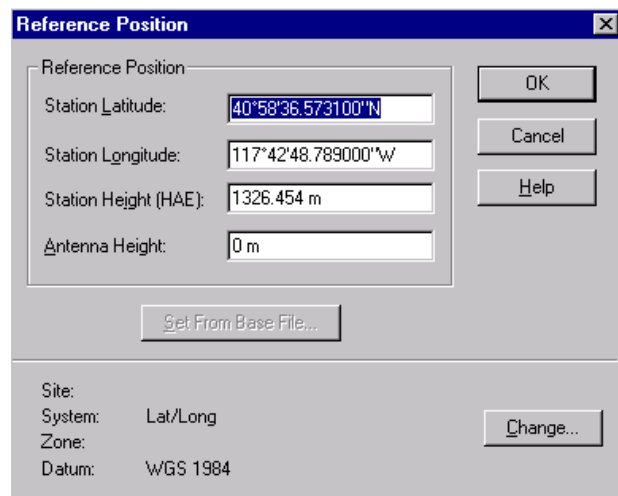
E) The “Confirm Internet Setup” window opens. Select <YES>

F) The “Confirm Selected Base Files” window opens.



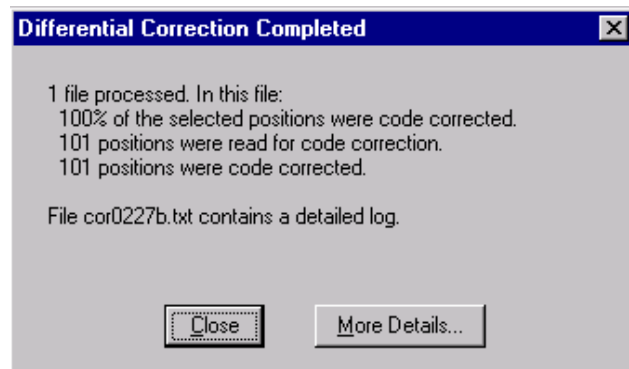
Make sure that all the Rover files have 100% Coverage. If they do Click on <OK>. If you do not have 100% coverage your file will not fully correct.

G) The “Reference Position” Window opens. This is the location of the Base Sation. Nothing needs to be edited here when using the Winnemucca Base Sation. Click on <OK>.

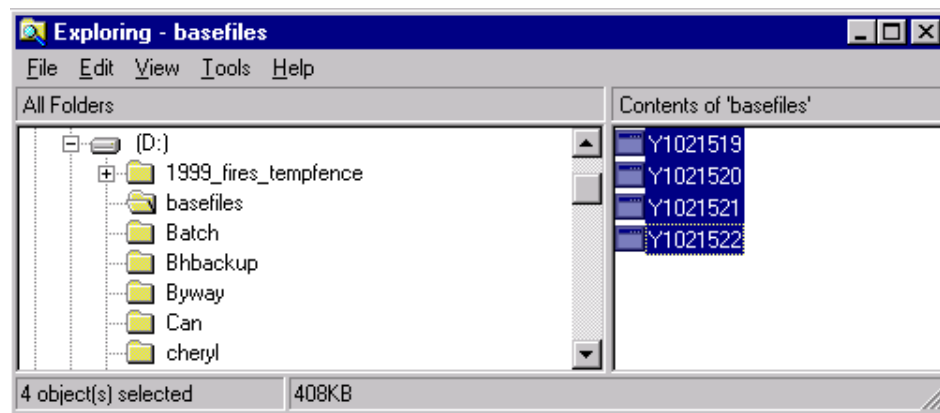


H) You are now back to the “Differential Correction Menu”. Both the Rover files and Base Files should be filled in. Click on <OK> to correct the files.

I) The “Differential Correction Completed” window opens. Confirm that the files did correct 100% and click on <Close>



J) Delete the base station files. The base station files are no longer needed and “Path Finder Office” copies the base stations from the Internet to your “Base File Folder” you created in step 2. The best way to delete the base station files is to use Windows NT Explorer. This can be found in <Start> Programs> <Windows NT Explorer> from your desk top.



<File> <Delete>

You now have two files for each GPS file you collected.

The file with the extension .ssf is the uncorrected file and has this icon.



The file with the extension .cor is the corrected file and has this icon.



You can view your files by going to <File> <Open>

Please do not forget to export your files to GIS.

